Serial No.: 10/585,016

Examiner: Robert E. Fennema

Reply to Office Action Mailed October 13, 2009

Page 2 of 14

## **Amendments to the Specification**

Please amend the paragraph starting on line 9 of page 5 of the specification with the following:

The so called overlapping submitting method means inserting a new command in the last cycle of certain command in which the certain command before will exiting the pipeline, as is shown in Fig. 5, Command G is inserted in the last cycle of Command A in which Command A will exiting, so as to avoid the appearance of bubble. In order to carry out the above method, it is required to provide a command exiting signal as early as possible during the pipeline period before the last cycle before of the command exiting the pipeline; and it shall ascertain that there is no command relevance between the newly inserted command and the exiting command; in addition, between the inserted and exiting commands, the possible conflict of command fields formed by registers (referring to the current registers) shall be resolved.

Please amend the paragraph starting on line 20 of page 6 of the specification with the following:

In Step 150, in order to ascertain that the command interpreter promptly determines the time of inserting the command, it is required to provide a command exiting signal as early as possible during the pipeline period <u>immediately</u> before the last cycle of the command exiting the pipeline, to help the command interpreter to determine the time of inserting the command. The position of releasing the pipeline exiting signal is fixed, which in this embodiment is at the <u>stage first which is</u> two stages <u>before when</u> the new command enters the pipeline stage. Taking Fig. 5 as an example, the new Command G is inserted at No. 1 pipeline stage, thus the pipeline exiting signal of the old Command A is released at the fifth stage of the one pipeline period before, and when the Command A to exit flows to the sixth stage pipeline, the command is added with judgment logic to determine whether or not to insert the new Command G.

Serial No.: 10/585,016

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Reply to Office Action Mailed October 13, 2009

Page 3 of 14

Please amend the paragraph starting on line 25 of page 7 of the specification with the following:

In some applications, the field conflict is inevitable, i.e. the new and old commands still need to use the current register in the same pipeline stage. In such case, a field branch is created, i.e. the field of the new command is inserted into the pipeline, while the field of the old command enters into the field branch, and such branch shall maintain until the last time the old command uses this field for operation. Fig. 7 illustrates the hardware structure of the field branch of one pipeline stage, and the other stages are same as this one. The so called field branch means there are two routes of current registers, one act as the major current register 71, while the other act as the field branch current register 72, which are connected to the input of the processing module 74 through a multi-route switch 73.